Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. UTILITY PATENT APPLICATION

678-1236 (P10806) Attorney Docket No. Chan-Soo HWANG, et al. First Inventor Transmitter And Receiver Provided In Wireless... EV333230384US

TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Label No. Mail Stop Patent Application APPLICATION ELEMENTS ADDRESS TO: Commissioner for Patents, P. O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria, VA 22313-1450 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) specification [Total Pages 27 (preferred arrangement set forth below) 3. Computer Readable Form (CRF) - Descriptive title of the invention b. Specification Sequence Listing on: - Cross Reference to Related Applications CD-ROM or CD-R (2 copies); or - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, ii. 🔲 or a computer program listing appendix Statements verifying identity of above copies - Background of the Invention - Brief Summary of the Invention **ACCOMPANYING APPLICATION PARTS** Brief Description of the Drawings (if filed) - Detailed Description Assignment Papers (cover sheet & document(s)) - Claim(s) 37 CFR 3.73(b) Statement Power of - Abstract of the Disclosure 10. Attorney (when there is an assignee) English Translation Document (if applicable) Drawing(s) (35 U.S.C. 113) [Total Sheets Copies of IDS Information Disclosure 12. 5. Oath or Declaration [Total Pages Citations Statement (IDS)/PTO-1449 Preliminary Amendment Newly executed (original or copy) Copy from a prior application (37 CFR 1.63 (d)) 13. Return Receipt Postcard (MPEP 503) 14. (for continuation/divisional with Box 18 completed) (Should be specifically itemized) Certified Copy of Priority Document(s) (if foreign priority is claimed) **DELETION OF INVENTOR(S)** 15. Signed statement attached deleting inventor(s) Request and Certification under 35 U.S.C. 122 named in the prior application, see 37 CFR 16. 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Ck. \$770.00 (filing fee) 6. Application Data Sheet. See 37 CFR 1.76 17. V Other: Ck. \$40.00 (recording fee) 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.:_ Prior application information: Group Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Correspondence address below Customer Number or Bar Code Label (Insert Customer No. or Attach ber code label here) Paul J. Farrell, Esq. Name DILWORTH & BARRESE, LLP 333 Earle Ovington Blvd. <u>Address</u> State Uniondale New York 11553 Zip Code City Country U.S.A Telephone (516) 228-8484 Fax (516) 228-8516 Registration No. (Attorney/Agent) 33,494 Name (Print/Type) October 24, 2003 Signature Date CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence and the documents referred to as enclosed are being deposited with the United States Postal Service on date below in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV333230384US addressed to Mail Sun Patent Application, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450.

Dated: October 24, 2003

(Name) Douglas M. Owens III

PTO/SB/17 (08-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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	4	for	FY	200	03		

Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	l (\$)	810.00

Complete if Known				
Application Number				
Filing Date	Concurrent herewith			
First Named Inventor	Chan-Soo HWANG, et al.			
Examiner Name				
Art Unit				
Attorney Docket No.	678-1236 (P10806)			

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check Credit card Money Other None None	3. ADDITIONAL FEES					
Deposit Account:	Large E				•	
Deposit 04 1101	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account Number 04-1121	1051	130	2051	65	Surcharge - late filing fee or oath	T CC T GIG
Deposit Account Dilworth & Barrese LLP	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
Name Camping in such a size of Act (shock of the Act and Act)	1053	130	1053	130	Non-English specification	
The Commissioner is authorized to: (check all that apply) Charge fee(s) indicated below Credit any overpayments	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
Charge any additional fee(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee	1805	1 840*	1805	1 840*	Requesting publication of SIR after	
to the above-identified deposit account.	1000	1,040	1000	1,040	Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	420	2252		Extension for reply within second month	
Large Entity Small Entity	1253	950		475	Extension for reply within third month	
Fee Fee Fee Fee Pee Paid Code (\$) Code (\$)	1254	1,480	2254	740	Extension for reply within fourth month	
1001 770 2001 385 Utility filing fee 770	1255	2,010	2255	1,005	Extension for reply within fifth month	
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appeal	
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 770.00	1452	110	2452	55	Petition to revive - unavoidable	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453	1,330	2453	665	Petition to revive - unintentional	
Fee from	1501	•	2501	665	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	1502	480	2502		Design issue fee	
Independent 2 3** 0 × 86 10.00	1503	640	2503		Plant issue fee	
Claims 2 - 3 = 0 x 00 - 40.00 Multiple Dependent 290 = 0	1460	130	1460	130	Petitions to the Commissioner	
Large Entity Small Entity	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Fee Fee Fee Fee <u>Fee Description</u>	1806	180	1806	180	Submission of Information Disclosure Stmt Recording each patent assignment per	
Code (\$)	8021	40	8021	40	property (times number of properties)	40
1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be	
1204 86 2204 43 ** Reissue independent claims over original patent	1801	770	2801	385	examined (37 CFR 1.129(b)) Request for Continued Examination (RCE)	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application	
	Other fee (specify)					
SUBTOTAL (2) (\$) 0.00 **or number previously paid, if greater; For Reissues, see above	*Redu	ced by	Basic	Filing F	Fee Paid SUBTOTAL (3) (\$) 40.0	00

(Complete (if applicable) SUBMITTED BY Registration No. Name (Print/Type) 33,494 Telephone (516) 228-8484 Date Signature October 24, 2003

CERTIFICATION UNDER 37 C.F.R. §1.10

I hereby certify that this correspondence and the documents referred to as enclosed are being deposited with the United States Postal Service on date below in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV333230384US addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: October 24, 2003

Atty. Docket No. <u>678-1236 (P10806)</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

UTILITY APPLICATION DATA SHEET UNDER 37 C.F.R. §1.76

Sir:						
Transmitted	ransmitted herewith for filing is the patent application of					
Inventor(s):	Chan-Soo HWANG, Seung-Hoon NAM, Yung Soo KIM and Jae-Hak CHUNG					
For:	TRANSMITTER AND RECEIVER PROVIDED IN WIRELESS COMMUNICATION SYSTEM USING FOUR TRANSMITTING ANTENNAS					
Enclosed are:						
[X] <u>21</u>	() 21 page(s) of specification					
[X] <u>1</u>	X] 1 page(s) of Abstract					
[X] <u>5</u>	X]5 page(s) of claims					
X]7 sheets of drawings [X] formal [] informal						
X] page(s) of Declaration and Power of Attorney						
ASSIGNEE NAME: SAMSUNG ELECTRONICS CO., LTD.						
ASSIGNEE	ASSIGNEE RESIDENCE: KYUNGKI-DO, KOREA					
	CERTIFICATION UNDER 37 C.F.R. § 1.10					

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date October 24, 2003, in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EV333230384US addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22312450.

Douglas M. Owens III

[]	This application claims the benefit under 35 U.S.C. §119(e) of U. Provisional Application(s) No(s).:							
	APPLICATION NO(S)	.:	FILING DATE					
[X]	[X] Certified copy of application							
Cour	ntry	Appln. No.	Filed					
REP	UBLIC OF KOREA	1454/2003	JANUARY 9, 2003					
from	from which priority under Title 35 United States Code, § 119 is claimed							
[]	is enclosed.	·						
[X]	will follow.							
	CALCULATION OF LITH ITY APPLICATION FEE							

CALCULATION OF UTILITY APPLICATION FEE

For	Number Filed	Number Extra	Rate	Basic Fee \$770.00
TOTAL CLAIMS	13	0	x 18 =	\$.00
INDEPENDENT CLAIMS	2	0	x 86 =	\$.00
[] Multiple Dep. Claim			290	\$.00
		TOTAL \$770.00		

Verified Statement of "Small Entity" Status Under 37 C.F.R. § 1.27. Reduced fees under 37 C.F.R. § 1.9(f) (50% of total) paid herewith §.

- [X] The amount of \$40.00 for recording the attached Assignment is enclosed as a separate check.
- [X] A Check in the amount of \$770.00 to cover the filing fee is attached.
- [] Charge fee to Deposit Account No. 04-1121. TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.

[X] Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and 1.17, at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. **04-1121**. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. **04-1121** therefor. **TWO** (2) **COPIES OF THIS SHEET ARE ENCLOSED.**

Respectfully submitted,

Date: October 24, 2003

Paul J. Farrell Reg. No. 33,494

Attorney for Applicant(s)

DILWORTH & BARRESE, LLP

333 Earle Ovington Blvd. Uniondale, NY 11553 Tel. No. (516) 228-8484 Fax No. (516) 228-8516

PJF/DMO/lah